Appln. Serial No. 09/851,592
Amendment Dated July 26, 2005
Reply to Office Action Mailed May 26, 2005

REMARKS

In the Office Action dated May 26, 2005, claim 40 was rejected under 35 U.S.C. § 112, ¶ 2; claims 1-8, 12-19, 28, 29, 31-36, 39, 40, 43, and 44 were rejected under § 103 over U.S. Patent No. 6,128,640 (Kleinman) in view of U.S. Patent No. 5,598,562 (Cutler); claims 9, 20-26, 41, and 42 were rejected under § 103 over Kleinman in view of Cutler and U.S. Patent No. 6,546,443 (Kakivaya); and claims 37 and 38 were rejected under § 103 over Kleinman alone.

Claims 1, 7, 8, 28, 29, 31-36, 43, and 44 have been cancelled, without prejudice.

REJECTION UNDER 35 U.S.C. § 112, ¶ 2

Claim 40 has been amended to address the § 112 rejection.

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REJECTIONS UNDER 35 U.S.C. § 103

Independent claim 21 has been amended at line 16 to fix a minor typographical error, which does not change the scope of the claim. Claim 21 was rejected as obvious over the asserted combination of Kleinman, Cutler, and Kakivaya. It is respectfully submitted that a *prima facie* case of obviousness has not been established for at least the reason that no motivation or suggestion existed to combine the reference teachings. *See* M.P.E.P. § 2143 (8th ed., Rev. 2), at 2100-129.

Claim 21 recites the provision of a queue containing entries associated with a first event object, each entry associated with a corresponding execution entity, where the plural entries of the queue enable plural execution entities to wait on the first event object. Moreover, claim 21 recites that a type variable is selectively set to one of a first value and a second value, with the first value indicating that the first event object is of an auto-reset type, and the second value indicating that the second event object is of a manual reset type. In response to the state of the first event object indicating the corresponding event has been signaled, the system automatically clears the state of the first event object to un-signaled state and awakens only one of the plural execution entities waiting on the first event object in response to the type variable being set to the first value. However, if the type variable is set to the second value, then the state of the first event object is not cleared until manually cleared, and all threads waiting on the first event object are awakened.

This type variable is not disclosed or suggested by either Kleinman or Cutler, a point that was conceded by the Office Action. *See* 5/26/2005 Office Action at 14-15. The Office Action relied upon Kakivaya as teaching such a type indication. *Id.*

Applicant respectfully submits that there existed no motivation to combine the teachings of Kleinman, Cutler, and Kakivaya. There are at least two reasons that a person of ordinary skill in the art would not have been motivated to combine the teachings of Kleinman and Kakivaya. First, Kleinman relates to the Unix operating system, whereas Kakivaya relates to a Windows operating system. Second, Kleinman uses a notify_all function to unblock (or awaken) all threads waiting for a particular event object. Kleinman, 5:53-54, 8:37-41. Kleinman makes no suggestion whatsoever of any need to selectively awaken just one thread, or awaken all threads,

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based on the type of event object. None of the cited references, Kleinman, Cutler, or Kakivaya, suggest any desirability to modify Kleinman to achieve the claimed invention.

It is well established law that "[t]he mere fact that the prior art could be so modified would not have made the modification **obvious** unless the prior art suggested the **desirability** of the modification." *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125 (Fed. Cir. 1984) (emphasis added). As the Federal Circuit has stated, "virtually all [inventions] are combinations of old elements." *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998). "Most, if not all, inventions are combinations and mostly of old elements." *Id.*

> Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'

Id.

The only basis for the proposed combination of reference teachings made in the Office Action is the disclosure of the present invention. However, relying upon the present invention to piece together un-related elements of prior art references constitutes impermissible hindsight. Kleinman is unambiguous in indicating the use of the notify_all() routine associated with an event object to unblock *all* threads waiting for the event. Kleinman, 8:37-41. There is no indication provided anywhere in Kleinman of any need to employ a different routine for the event object that can selectively notify only one thread or all threads based on a type variable. If the benefits of modifying Kleinman as proposed by the Office Action were so apparent, as the Office Action contended, then Kleinman would have proposed the use of a different routine associated with an event object that enables selective notification of only one thread or of all threads upon signaling of the event. The fact that Kleinman does not even hint at using such a different routine is strong objective evidence that a person of ordinary skill in the art would not have been motivated to modify Kleinman to incorporate the teachings of Kakivaya.

The Office Action argued that Kakivaya teaches that various substitutes to the Microsoft Windows operating system could be used in Kakivaya's system. 5/26/2005 Office Action at 19.

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The Office Action further argued that Kakivaya's "invention is not limited to only Window operating system (based on the claim and abstract of the patent)." *Id.* This was a basis for the assertion in the Office Action that "one of ordinary skill in the art could apply the technique and modify it to work in different type of operating system." *Id.*

Applicant respectfully disagrees. Note that the abstract and claims of Kakivaya do not add teachings in addition to the teachings of the specification of Kakivaya, which is focused on the Windows operating system. Note that the Kakivaya patent is owned by Microsoft Corporation, which makes Windows operating systems. Thus, clearly, the focus of the Microsoft patent is the Windows operating system. A person of ordinary skill in the art would not have been motivated to apply techniques of the Windows operating system to the Unix operating system environment described in Kleinman.

Cutler does not provide any suggestion or teaching that would have motivated a person to apply the teachings of Kakivaya to Kleinman. Therefore, since no motivation or suggestion existed to combine the teachings of Kleinman, Cutler, and Kakivaya, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 21.

Claim 9 has been amended from dependent form to independent form, with the scope of claim 9 remaining *unchanged*. Claim 9 was rejected as being obvious over Kleinman, Cutler, and Kakivaya. In view of the fact that no motivation or suggestion existed to combine the teachings of Kleinman, Cutler, and Kakivaya, as discussed above, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 9.

Independent claim 37 was rejected as being obvious over Kleinman alone. The Office Action conceded that Kleinman fails to teach or suggest an event library to provide an event-based synchronization mechanism as recited in claim 37. 5/26/2005 Office Action at 18. Nevertheless, the Office Action stated that "[b]ecause there are multiple event classes in the system, it would have been obvious to one of ordinary skill in the art to put all the event classes in the library for easier maintenance and use." *Id.* However, the Office Action has failed to provide support in the form of objective evidence for the assertion that a person of ordinary skill in the art would have been motivated to modify Kleinman to incorporate the event library for providing an event-based synchronization mechanism. If a reference exists that suggests a modification of Kleinman to incorporate the event library to provide an event-based

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synchronization mechanism, then Applicant respectfully requests the production of such a reference. Absent such a reference, a *prima facie* case of obviousness has not been established with respect to claim 37.

All dependent claims are allowable for at least the same reasons as corresponding independent claims. Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 14-0225 (9491).

Respectfully submitted,

Date: July 26, 2005

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